Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Cancel claims 1 - 32. Add new claims 33 - 56.

33. (New) A method for the production of a silicon single crystal comprising pulling the single crystal, according to the Czochralski method, from a melt which is held in a rotating crucible, the single crystal growing at a growth front; and

supplying heat to the center of the growth front by a heat source acting on the center of the growth front, so that per unit time, more heat reaches the center of the growth front than the edge region of the growth front surrounding the center.

34. (New) The method of claim 33, wherein a curvature of the growth front is reduced or increased.

35. (New) The method of claim 33, wherein an axial temperature gradient G(r) at the growth front is regulated, r extending from 0 as far as a radius of the growing single crystal.

36. (New) The method of claim 33, wherein a temperature distribution, in which a radial variation of a temperature gradient G(r) in the melt is less than 15%, is produced in a region with an extent of up to 5 cm below the growth front and at least 90% of a diameter of the single crystal.

37. (New) The method of claim 33, wherein a heat flux is produced by the heat source, which increases the temperature at a center of a bottom of the crucible compared with the temperature at an edge of the bottom of the crucible.

38. (New) The method of claim 37, wherein a bottom heater is arranged below the crucible, and thermal insulation is used to ensure that the bottom heater heats the center of the bottom of the crucible more strongly than an edge of the bottom of the crucible.

39. (New) The method of claim 37, wherein the heat source is arranged at the center of the bottom of the crucible.

40. (New) The method of claim 37, wherein the temperature of the crucible at the center of the bottom of the crucible is increased by at least 2 K relative to the temperature at the edge of the bottom of the crucible.

41. (New) The method of claim 33, wherein the heat source is arranged below the growth front in the melt.

42. (New) The method of claim 33, wherein a heat flux is produced by iso-rotation of the single crystal and the crucible, the crucible being rotated with at least 10% of a rotational speed of the single crystal.

43. (New) The method of claim 42, wherein the melt is exposed to a CUSP magnetic field.

44. (New) The method of claim 42, wherein the melt is exposed to a traveling magnetic field.

45. (New) The method of claim 33, wherein a heat flux is produced by an electromagnetic field to which the melt is exposed, at least 10% of a wall area of the crucible being shielded against an effect of the electromagnetic field on the melt.

46. (New) The method of claim 45, wherein the heat flux is produced by a traveling magnetic field.

47. (New) The method of claim 46, wherein a rotational symmetry of the electromagnetic field is broken by a partial shielding of the field.

48. (New) The method of claim 33, wherein a heat flux is produced by applying a positive electrical voltage of more than 100 volts to the crucible.

49. (New) The method of claim 33, wherein additional heat is supplied to a phase boundary of the single crystal, to the atmosphere surrounding the phase boundary and to the melt.

50. (New) The method of claim 33, wherein the growing single crystal is cooled by a cooling device.

51. (New) The method of claim 33, wherein a fluctuation of a pull rate when pulling a silicon single crystal with a diameter of at least 200 mm, with a pull rate at which neither defects due to agglomerated vacancies nor defects due to agglomerated interstitial atoms are created, is at least $\pm$ 0.02 mm/min while the single crystal is being pulled over a length of at least 30 mm.

52. (New) A silicon semiconductor wafer with agglomerated vacancy defects (COPs) as a defect type, these defects being covered with an oxide layer whose thickness is less than 1 nm.

53. (New) The semiconductor wafer of claim 52, wherein said defects have an average diameter of less than 50 nm.

54. (New) The silicon semiconductor wafer of claim 52, having at least one region with agglomerated interstitial atoms (LPITs) as the defect type, wherein said agglomerated interstitial atoms are so small that no secondary dislocations are also present.

55. (New) The silicon semiconductor wafer of claim 53 having at least one region with agglomerated interstitial atoms (LPITs) as the defect type, wherein said agglomerated interstitial atoms are so small that no secondary dislocations are also present.

56. (New) A device for the production of a single crystal according to the Czochralski method, comprising:

a crucible which contains a melt;

a heating device surrounding the crucible;

a magnetic instrument surrounding the crucible and producing a static or dynamic magnetic field;

a heat source arranged above the melt and supplying heat to the phase boundary of the single crystal, to the gas phase and to the melt;

a cooling device surrounding the single crystal;

a heat shield surrounding the single crystal; and

a heat source acting on a center of the growth front of a crystal being produced in said crucible.